SECTION – B
SHORT QUESTION

Q-02: Find the value of $x - y$ when $x + y = -9$ and $xy = 20$.

Q-03: Find the factors of $a^2(b - c) + b^2(c - a) + c^2(a - b)$

Q-04: If $A = \{1,2,3,4\}$, find the two sets B and C that are subset of A such that $B \subseteq C$.

Q-05: Prove that $\cot\theta + \tan\theta = \cot\theta \sec^2\theta$.

Q-06: Find the logarithm of 125 to the base $5\sqrt{5}$.

Q-07: Discuss the advantages of tabulation and classification.

Q-08: Simplify: $\frac{4}{x^2 - 4x - 5} + \frac{8}{x^2 - 1}$

Q-09: If $x + 7 : 2(x + 14)$ is the duplicate ratio of $5 : 8$, find the value of x.

Q-10: Find the solution set of $[5y - 3] - 6 = 3$.

Q-11: Prove that the sum of measures of the angles of a triangle is 180°.

Q-12: Eliminate 'y' from the equation $y + \frac{1}{y} = b$ and $y^3 + \frac{1}{y^3} = a^3$

Q-13: If $y = \sqrt{5} - 2$, find the value of $y^2 - \frac{1}{y^2}$

Q-14: Find the inverse of $\begin{bmatrix} 1 & 2 \\ 0 & 1 \end{bmatrix}$

Q-15: Define anyone of the following terms and illustrate by drawing figure.
(i) Adjacent angles (ii) Vertically opposite angles